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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,221	10/14/2003	Ronald Bogert	1001-113	7423

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EXAMINER	
GOFF II, JOHN L	
ART UNIT	**PAPER NUMBER**
1733	

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application No.** 10/685,221	**Applicant(s)** BOGERT ET AL.	
	Examiner John L. Goff	**Art Unit** 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2003*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☒ Claim(s) *13-17* is/are allowed.
6)☒ Claim(s) *1-8,11,12,18-26 and 28-30* is/are rejected.
7)☒ Claim(s) *9,10 and 27* is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *14 October 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☐ All b)☐ Some * c)☐ None of:
1.☐ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *5/13/04*.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

S-00

DETAILED ACTION

Claim Objections

1. Claims 19 and 24 are objected to because of the following informalities: In claim 19, line 2 delete "exposing includes". In claim 24, lines 1 and 2 delete "exposing the adhesive material to heat" and insert therein - - substantially fully curing the adhesive material - - because as claimed the full cure occurs during a painting or e-coat process, see claim 23, not during the initial exposure to heat step. Appropriate correction is required.

Drawings

2. New corrected drawings are required in this application because the drawings submitted 10/14/03 are objected to by the draftsperson, see attached PTO-1449. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Larsen (U.S. Patent 4,950,348).

Larsen discloses a method of forming an automotive reinforcement assembly, e.g. a door panel assembly, utilizing an adhesive partially cured in a first heating step, e.g. inductive or infrared heating, and completely cured in a second heating step, e.g. in a process of painting the automobile, performed after installing the assembly within an automobile to decrease the time required for forming the automotive reinforcements and the automobile. Larsen teaches the method comprises providing a first member, a second member, and a structural adhesive, e.g. epoxy, positioning the adhesive between the first member and second member, partially curing the adhesive by locally exposing the adhesive to heat, e.g. from an inductive or infrared source, to an extent that the first and second member adhere to each other to form an assembly capable of being transported, transporting the assembly to an automobile, mounting the assembly within the automobile, e.g. in the door when the assembly formed as a door panel, and further curing the adhesive during additional automobile processing steps, e.g. painting the automobile (Column 1, lines 36-37 and 63-68 and Column 3, lines 2-3 and 17-25 and Column 6, lines 4-11).

Regarding claim 11, Larsen does not specifically disclose the particular amount of the adhesive that is cured in the partial curing step. However, the claimed range, 30% to 97%, is sufficiently broad that it appears any amount of partial curing to an extent that the assembly is adhered sufficiently for transport would fall within this range and thus, the claim is anticipated.

Regarding claim 12, the language "partially curing the adhesive material includes substantially fully curing the adhesive" requires nothing more than the adhesive is partially cured as a partially cured adhesive by definition includes parts that are substantially fully cured and thus, the claim is anticipated. Furthermore, applicants specification discloses a method whereby the adhesive undergoes an initial cure and a secondary cure, and as the specification does not provide a degree/amount for the term "substantially" and an adhesive fully cured in an initial cure could not undergo a secondary cure it appears in the context of applicants disclosure the language merely requires partially curing the adhesive, it being noted a first fully cured step without a secondary cure appears to describe the admitted prior art.

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 12, 18, 25, and 29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bradtke (WO 99/17947).

Bradtke discloses a method of forming an automotive door reinforcement assembly and an automobile including the assembly. Bradtke teaches the method comprises providing a door beam, a bracket, and a structural epoxy adhesive, positioning the adhesive between the door beam and bracket, substantially fully curing, i.e. at least partially curing, the adhesive by placing the door beam, bracket, and interposed adhesive into an oven to form an assembly, transporting the assembly to an automobile, and mounting the assembly in the door of the automobile (Page 4, lines 16-17 and Page 5, lines 10-19 and 27-30 and Page 6, lines 1-4). It is noted Bradtke does not specifically teach that prior to positioning the adhesive between the door beam and bracket the adhesive is attached to one of the door beam or bracket, however, it appears that because attaching may occur after positioning the adhesive between the door beam and bracket the attachment step is inherent. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to press the adhesive to one of the door beam or bracket prior to positioning all of the components together to accurately align the adhesive on the components.

Claim Rejections - 35 USC § 103

8. Claims 1-5, 7, 11, 12, 18-25, 28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geise et al. (U.S. Patent 6,135,541) in view of Larsen.

Geise et al. disclose a method of forming an automotive door with reduced noise generated from vibrations within the door. Geise et al. teach the method comprises adhering a door beam to a bracket through a layer of structural adhesive to form a reinforcement assembly and installing the assembly within the door of an automobile (Column 3, lines 47-51 and 57-60). Geise et al. do not specifically teach partially curing the adhesive during the formation of the reinforcement assembly followed by fully curing the adhesive in a subsequent step after installation of the assembly, it being noted Geise et al. are silent as to the process for curing the adhesive. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Geise et al. to partially cure the adhesive during formation of the reinforcement assembly followed by fully curing the adhesive after the assembly is transported and installed within an automobile, e.g. during painting of the automobile, as was a well known technique in the art as show for example by Larsen to decrease the time required for forming both the automotive reinforcement assembly and the automobile. Larsen is described above in full detail. It is noted Geise et al. as modified by Larsen do not specifically teach that prior to positioning the adhesive between the door beam and bracket the adhesive is attached to one of the door beam or bracket, however, it appears that because attaching may occur after positioning the adhesive between the door beam and bracket the attachment step is intrinsic. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to press the adhesive to one of the door beam or bracket prior to positioning all of the components together to accurately align the adhesive on the components.

Regarding claims 11 and 21, Geise et al. as modified by Larsen do not specifically disclose the particular amount of the adhesive that is cured in the partial curing step. However, the claimed range, 30% to 97%, is sufficiently broad that it appears any amount of partial curing to an extent that the assembly is adhered sufficiently for transport would fall within this range.

and thus, the limitation is met. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine the particular amount of partial curing as a function of the degree of partial cure required for acceptable transportability as doing so would have required nothing more than ordinary skill and routine experimentation.

Regarding claims 12 and 24, the language "partially curing the adhesive material includes substantially fully curing the adhesive" requires nothing more than the adhesive is partially cured as a partially cured adhesive by definition includes parts that are substantially fully cured and thus, limitation is met. Furthermore, applicants specification discloses a method whereby the adhesive undergoes an initial cure and a secondary cure, and as the specification does not provide a degree/amount for the term "substantially" and an adhesive fully cured in an initial cure could not undergo a secondary cure it appears in the context of applicants disclosure the language merely requires partially curing the adhesive, it being noted a first fully cured step without a secondary cure appears to describe the admitted prior art.

Regarding claim 20, Geise et al. as modified by Larsen do not specifically disclose the time the adhesive is cured in the partial curing step. It would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine the time required for partial curing as a function of the degree of partial cure required for acceptable transportability as doing so would have required nothing more than ordinary skill and routine experimentation.

Regarding claim 25, Geise et al. do not require any particular adhesive. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the adhesive taught by Geise et al. those well known and conventional in the art used for the same purpose such as epoxy as shown for example by Larsen as only the expected results would be achieved.

9. Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geise et al. and Larsen as applied to claims 1-5, 7, 11, 12, 18-25, 28, and 30 above, and further in view of Uchida et al. (U.S. Patent 5,580,119).

Geise et al. and Larsen as applied above teach all of the limitations in claims 6 and 26 except for a teaching of the bracket attached to a foam member. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include attached to the bracket of the reinforcement assembly taught by Geise et al. as modified by Larsen a foam member to provide the automotive door with increased crash reinforcement as was known and shown for example by Uchida et al.

Uchida et al. are exemplary in the art of an automotive door including a reinforcement assembly wherein the assembly includes a door beam and a bracket. Uchida et al. teach attached to the bracket is a foam member to increase the crash reinforcement of the door (Figure 6 and Column 2, lines 14-30).

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geise et al. and Larsen as applied to claims 1-5, 7, 11, 12, 18-25, 28, and 30 above, and further in view of Krock (U.S. Patent 5,547,152).

Geise et al. and Larsen as applied above teach all of the limitations in claim 8 except for a teaching of using a two-piece bracket, it being noted the objective of Geise et al. is to decrease vibration with the door as much as possible. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include as the bracket taught by Geise et al. as modified by Larsen a two-piece bracket to provide the automotive door with decreased vibration noise as was known and shown for example by Krock

Krock is exemplary in the art of an automotive assembly wherein the assembly includes a beam and a bracket. Krock teaches the bracket is a two-piece bracket to prevent movement of the beam and thus, decrease noise vibration from the assembly (Figure 1 and Column 1, lines 5-7 and 15-20 and Column 3, lines 9-15).

Allowable Subject Matter

11. Claims 13-17 are allowed.

12. Claims 9, 10, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest a method of forming a reinforcement assembly comprising providing a door beam, a two-piece bracket, and a structural adhesive, positioning the adhesive between the door beam and bracket, welding both pieces of the two-piece bracket together, partially curing the adhesive to an extent that the beam and two-piece bracket adhere to each other to form an assembly capable of being transported, and transporting the assembly.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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